Face shape annotations for the RWTH-PHOENIX corpus

You can download here our face shape annotations – along with the corresponding images – for the seven signers who appear in the RWTH-PHOENIX corpus. The archive contains one directory by signer, each of which contains an "images" subdirectory and a "points" subdirectory. All image files are 300×260 PNG images. All face shape annotation files are ASCII files with the filename extension ".pts".

**Distribution of the annotated images among the signers**

In total 369 images from the RWTH-PHOENIX corpus (more precisely from the RWTH-PHOENIX-v02-split01-TRAIN snapshot) have been manually annotated with the face shape.

Signer	# annotated images
Bastienne Blatz	61
Christian Plugfelder	53
Karina Orlowski	42
Kira Knuehmann	65
Magdalena Meisen	62
Silke Lintz	51
Stephanie Prothmann	35

Structure of a face shape annotation file (".pts" file)

For each image the face shape annotation consists of the ordered list of the positions of 38 facial landmarks. Each facial landmark – or face shape point – has two coordinates in the axis system originating at the top-left corner of the image, with the x-axis pointing right and the y-axis pointing down. The actual structure of a ".pts" file is as follows:

```
version: 1
n_points: 38
{
x_1  y_1
x_2  y_2
...
x_38 y_38
}
```
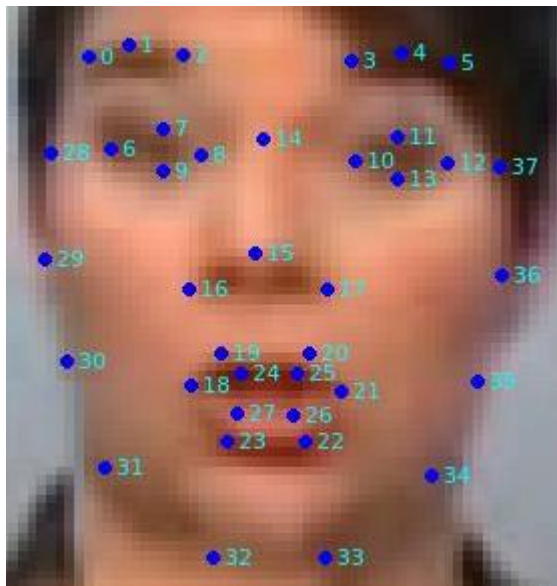
A possible interpretation of the shape points as face parts is as follows (using zero-based indexing in the list of points of a ".pts" file):

Shape point indices	Face part
0-1-2	upper part of the left eyebrow
3-4-5	upper part of the right eyebrow
6-7-8-9	eyelids of the left eye
10-11-12-13	eyelids of the right eye
14-15	nasal ridge
16-17	nasal base
18-19-20-21-25-24	upper lip
18-23-22-21-26-27	lower lip
28-29-30-31-32-33-34-35-36-37	cheeks and chin

N.B. The original images from the RWTH-PHOENIX corpus do not have square pixels and come in 210×260 image resolution. Therefore the annotated data provided here should be scaled appropriately if the goal is to build models that are relevant to the entire corpus from these data. Scaling both the images and the shapes by a factor 210/300 *in the horizontal direction only* (x-coordinates) will do the trick!